

Title (en)

METHOD AND SYSTEM FOR MONITORING THE AUTONOMIC NERVOUS SYSTEM OF A SUBJECT

Title (de)

VERFAHREN UND SYSTEM ZUR ÜBERWACHUNG DES AUTONOMEN NERVENSYSTEMS EINER PERSON

Title (fr)

PROCÉDÉ ET SYSTÈME DE SURVEILLANCE DU SYSTÈME NERVEUX AUTONOME D'UN SUJET

Publication

EP 3107444 B1 20200902 (FR)

Application

EP 15704805 A 20150217

Priority

- FR 1451257 A 20140217
- EP 2015053345 W 20150217

Abstract (en)

[origin: WO2015121503A1] The invention describes a method and a system for monitoring the autonomic nervous system (SNA) of a subject (10), comprising: acquiring at least one physiological signal comprising W heartbeats, generating a datum which is a function of the variability of the heart rate (VFC) on the W heartbeats, the VFC comprising W-1 RR intervals separating two consecutive heartbeats detected respectively at the moments t_{k-1} and t_k , each RR interval having a duration with a value $a_k = t_k - t_{k-1}$ where $k = (X - W + 2) \dots X$; using at least one microprocessor to calculate at least one parameter from among the parameter TAS(tx) representing the level of activity of the sympathetic system and/or the parameter TAP(tx) representing the level of activity of the parasympathetic system; and/or other parameters, and/or the parameter NS(tx) representing a stress level of the subject at the moment tx and calculated using the equation $NS(tx) = 100 + TAS(tx) - TAP(tx)$; and supplying a datum representative of said at least one parameter.

IPC 8 full level

A61B 5/00 (2006.01); **A61B 5/024** (2006.01); **A61B 5/0456** (2006.01); **A61B 5/0482** (2006.01); **A61B 5/16** (2006.01); **A61B 5/352** (2021.01); **A61B 5/375** (2021.01)

CPC (source: EP US)

A61B 5/02405 (2013.01 - EP US); **A61B 5/02416** (2013.01 - EP US); **A61B 5/0245** (2013.01 - US); **A61B 5/165** (2013.01 - EP US); **A61B 5/352** (2021.01 - EP US); **A61B 5/4035** (2013.01 - EP US); **A61B 5/681** (2013.01 - US); **A61B 5/7415** (2013.01 - US); **A61B 5/744** (2013.01 - US); **A61B 5/486** (2013.01 - EP US); **A63F 13/212** (2014.09 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2015121503 A1 20150820; EP 3107444 A1 20161228; EP 3107444 B1 20200902; FR 3017529 A1 20150821; FR 3017529 B1 20210423; US 10856797 B2 20201208; US 2017127994 A1 20170511

DOCDB simple family (application)

EP 2015053345 W 20150217; EP 15704805 A 20150217; FR 1451257 A 20140217; US 201515119276 A 20150217